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BUILDING FOR TOMORROW

The MBTA's

Capital

Program

FY93-FY97



GOVERNMENTS COLLECTION

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November 1992

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

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MBTA capital needs for vital infrastructure reinvestment and mandated projects for the next five years exceed available funds by about \$2 billion.

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After \$4 billion of expansion and renewal during the Eighties, the MBTA must concentrate on protecting and strategically extending that investment in the Nineties.

Section 2: Expanded Detail Page 8

MBTA five-year capital needs focus almost entirely on mandated projects (ADA and the Clean Air Act) and commitments made by or on behalf of the T to support Central Artery/Third Harbor Tunnel construction and the Statewide Implementation Plan.

Section 3: Funded and Unfunded Projects Page 1.2

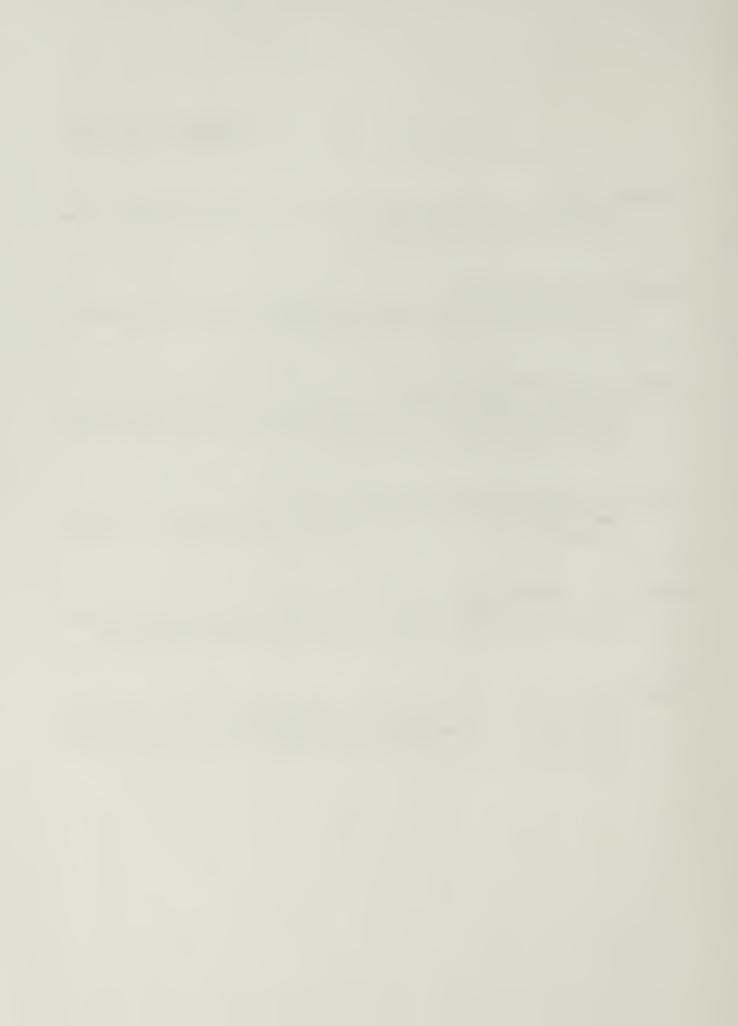
Funded capital projects for FY93-FY97 total \$2.2 billion, but vital unfunded needs total nearly the same amount.

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To augment the \$2.2 billion now available for capital work, the MBTA needs to tap additional federal funds and pursue a range of alternative funding sources and mechanisms at the state level.

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To close the \$2 billion gap in five-year capital funding and avoid serious declines in service, safety, environmental quality, and economic growth, the MBTA must forge close planning and working relations with the rest of state government, and further strengthen its role as a partner in economic progress for the Commonwealth.



Building for Tomorrow



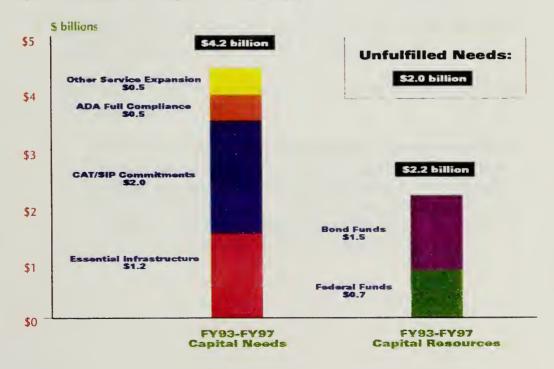
The MBTA Capital Program FY93-FY97 November 1992

Abstract

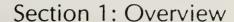
MBTA capital investments in the last decade have been driven largely by an urgent need to expand infrastructure and service, and to recover from years of deferred maintenance and neglect. Today a good deal — though not all — of that mission of restorative growth has been accomplished. Now, looking toward a new century, capital decisions will be shaped by a new imperative: continuing infrastructure reinvestment. Without a dedicated program of sustained renewal, the MBTA will face another expensive and counterproductive slide into neglect as it strives to meet the external mandates and challenges of the Americans with Disabilities Act, the Clean Air Act, and Central Artery/Third Harbor Tunnel construction.

The MBTA currently estimates that total capital spending needs for the five-year period FY93 through FY97, including infrastructure reinvestment and mandated and other expansion projects, will be \$4.4 billion. With anticipated state and federal resources over the period amounting to just \$2.2 billion, the Authority faces a shortfall of about \$2 billion over the next five years.

Figure 1: MBTA Capital Needs and Resources









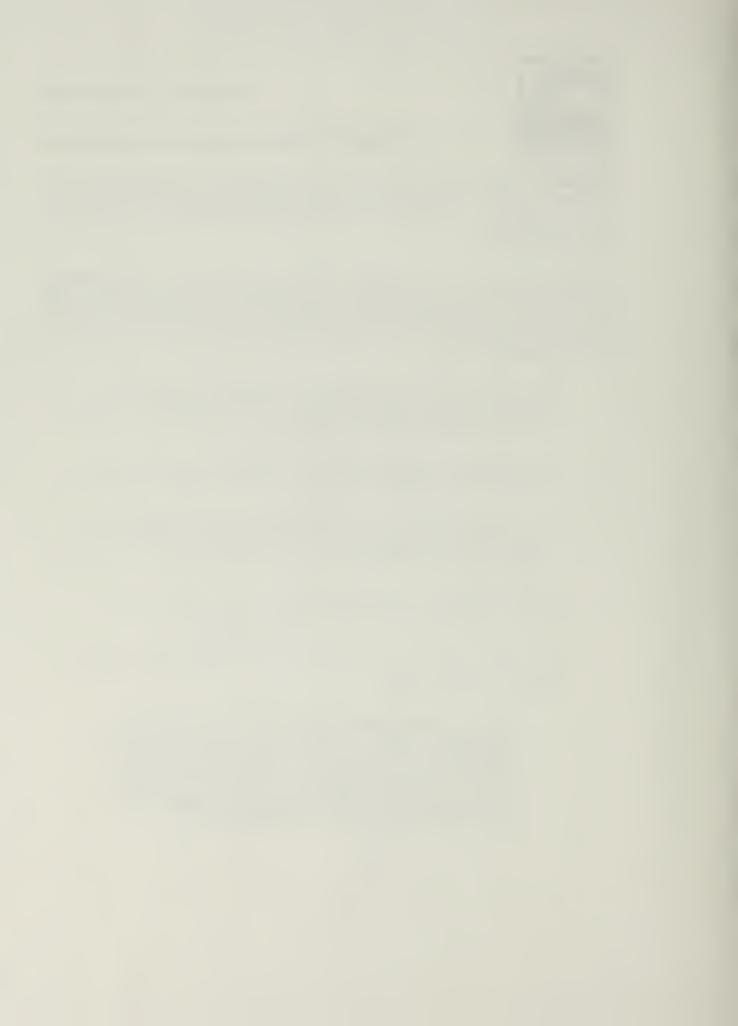
The Eighties: Focus on Expansion and Renewal

MBTA operations reached an historic low in 1980, when a deteriorated physical plant, unreliable service, poor management, low productivity, and rock-bottom public confidence culminated in a one-day shutdown of the system during a Beacon Hill funding impasse.

Twelve years later, the T has made phenomenal progress rebuilding and expanding its system and improving its management. The physical renaissance was made possible by more than \$4 billion in state and federal capital investments to restore assets scarred by years of deferred maintenance, and to extend service to under-served areas. Major accomplishments include:

- The T has relocated and depressed its Orange Line along the Southwest Corridor through the South End, Roxbury, and Jamaica Plain, on land once destined for a highway project.
- Red Line service to Harvard Square in Cambridge was extended 3.2 miles to Alewife in North Cambridge.
- The Needham commuter rail line was reconstructed, along with ten of the T's busiest Orange and Red Line subway stations and miles of track throughout the MBTA system.
- Hundreds of buses, rail and subway cars, and locomotives were rebuilt or purchased new under the capital program.
- More than 12,000 new parking spaces were added across the system between 1982 and 1991.

The investment has paid off: Ridership has grown more than 21 percent on the bus and subway systems and more than 100 percent on commuter rail, a strong 9 in 10 customers express satisfaction with T services (compared to only half in 1981), and about 5,000 construction and related jobs were created per year as the work progressed.



The Nineties: Mandates and Vital Reinvestment

The T's capital program continues with new urgency in the 1990's. Federal mandates such as the Clean Air Act and the Americans with Disabilities Act (ADA) require a continuing search for significant capital resources, because the mandates included no provision for funding the cost of compliance. The quickening pace of Central Artery/ Third Harbor Tunnel construction means that the MBTA must provide reliable alternatives to highway commuting, both to ease construction's impact on traffic and to expand reliance on mass transportation so that the rebuilt Artery will work over time.

Moreover, the T must expand and adapt its services in light of changing demographic and development patterns, and engage itself in regional growth issues, by way of making its service mix even more responsive to the transit requirements of the Boston and eastern Massachusetts region. For ridership to continue growing, and for market share to be increased, the Authority must be able to make continuous, forward-thinking capital investments in mass transit.

The MBTA is now engaged, in conjunction with the Executive Office of Transportation and Construction, in developing a new Program for Mass Transit that will map investment patterns for the next generation of capital improvements at the T. The Authority has already embarked on a range of initiatives that will help shape the transportation future of the region, including:

- Commuter rail extensions to Worcester and Newburyport and along the Old Colony line abandoned in 1959.
- Construction of a bus terminal over the rail platforms at South Station.
- Creation of a new transitway using trolley buses linking South Boston piers to the South Station Transportation Center.
- Modernization of the Blue Line to make stations accessible to the disabled, improve Logan Airport access, increase line capacity, and improve track, signals, and power.
- Bus rehabilitation and purchases.
- Accessibility improvements at key stations throughout the system, including, for the first time, the Green Line streetcar system.
- Procurement of improved fare collection equipment for all subway stations.



These projects follow a clear MBTA capital investment strategy, which in turn follows organization-wide guidelines established by the Board of Directors. This capital strategy is designed to:

- Reinvest in the existing system to make the operation more reliable, to support economic growth in the Commonwealth, and meet the growing demands of Central Artery/Third Harbor Tunnel construction.
- Support cost-effective measures to satisfy the requirements and the spirit of the Clean Air Act and the Americans with Disabilities Act.
- Ensure that long term investments increase productivity and operational effectiveness.

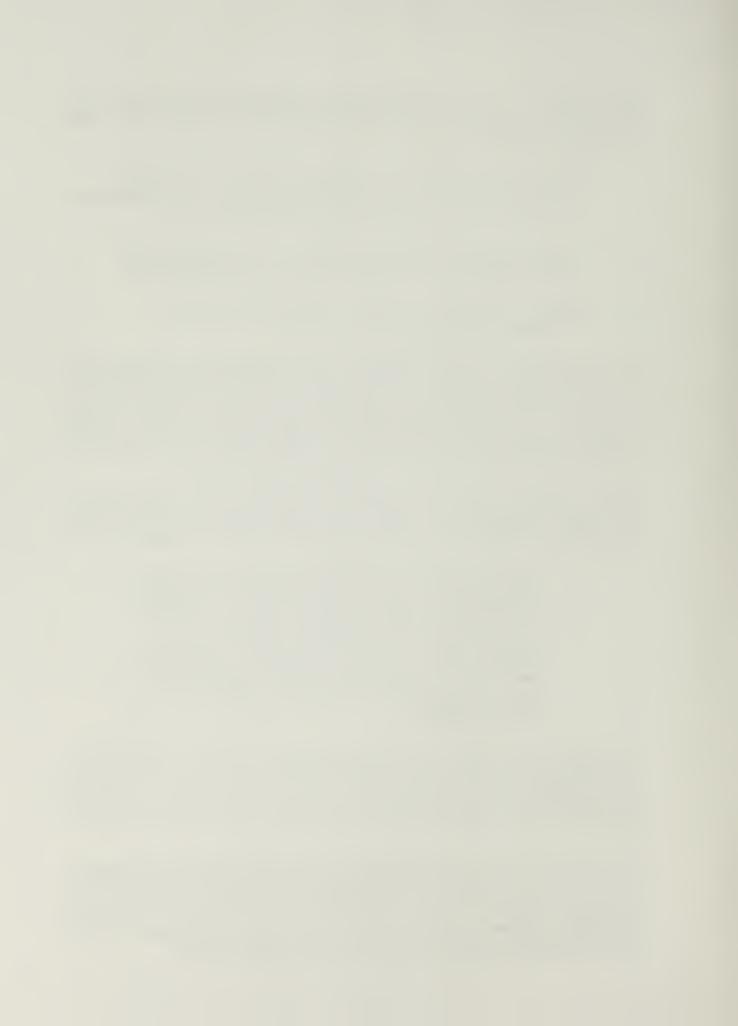
For example, Blue Line modernization and bus rehabilitation and procurement represent top infrastructural reinvestment priorities for the Authority. The Blue Line investments involve increasing capacity, renovating stations (including accessibility improvements), purchasing new rolling stock, and upgrading track, power, and signal systems. When the work is finished, service will be improved, the infrastructure hardened, and an important focus of Artery mitigation strengthened.

Bus fleet projects are designed to put the fleet — for the first time in MBTA history — on a regular replacement and rehabilitation schedule, with the goal of improving reliability and cutting the average age of the fleet in half, from 12 years to six.

These new buses will meet Clean Air and ADA standards. And in keeping with the Authority's mission of supporting Artery/Tunnel construction, enlarging the bus fleet strengthens the T's most flexible mitigation weapon. Ensuring that the fleet is in top condition makes mitigation response still more flexible. These bus investments are consistent with a new bus fleet plan that now drives our capital activities for surface operations.

Note also that bus fleet planning helps carry out the Authority's goal of increasing privatization opportunities. As privatization increases — provided it does not involve providing rolling stock to successful bidders — the MBTA Bus Fleet Plan will respond by lowering new purchase requirements proportionally in the later years of this five-year cycle.

Another useful example of capital integration with operational goals is the Operations Control Center project now under way, which will improve real time control and response for the system, and join with new fare collection equipment and market research/demographic initiatives to give the Authority better information on trends in system usage, and the ability to react faster as such trends develop.



The Cost of Compliance

But these planned investments represent only a part of the total capital spending need faced by the MBTA in the FY93-FY97 period. Continuing progress in renewing and extending essential mass transit services is jeopardized by a looming confluence of mandated, committed, and binding obligations. Perhaps the most crucial obligation involves ongoing investment in maintaining a state of good repair on an MBTA system — including right-of-way, bridges, structures, rolling stock, and so on — now replacement-valued at more than \$7 billion. System-wide, the Authority estimates that \$300 million a year (representing less than 5 percent of the total value) is required to maintain that \$7 billion asset and prevent another ill-advised cycle of deferred maintenance.

With state bond spending capped at \$280 million in FY93 and \$300 million in FY94-97, the Authority could exhaust its entire bond fund just keeping pace with prudent infrastructural repair and replacement. Payment on bonded debt now accounts for 28 percent of the T's operating budget, and though it has begun to decline, the percentage has been growing at an annual average of 14.6 percent over the last ten years (the T's other operating expenses grew just 5.9 percent a year over the same period).

As it is, the T cannot now keep up with the need for this vital infrastructural reinvestment, and risks long-term damage to its reinvigorated, taxpayer-supported system. Without continuous infrastructural renewal, neglect will compound neglect exponentially, as signals begin to fail, vehicles break down, stations deteriorate, and general confidence in the service dissolve.

To meet all requirements of the Americans with Disabilities Act, the T will need to spend about \$1 billion. As part of this obligation, simply making all subway and commuter rail stations accessible will cost the Authority nearly \$300 million over the next 20 years. In the next five years, the T plans to spend \$55 million on accessibility at designated key stations, and \$280 million to buy accessible Green Line vehicles (total eventual Green Line project cost — \$320 million).

To meet the requirements of the Clean Air Act and Central Artery construction, the Authority needs to spend \$2.0 billion over the next five years. The largest project in this area — and the largest in the five-year plan — is the \$480 million restoration of the Old Colony rail line to the South Shore, with 64 percent of the costs shared by the federal government. Other major Clean Air/Central Artery-related projects include the \$80 million extension of commuter rail service to Worcester and the \$342 million South Boston Piers Transitway.



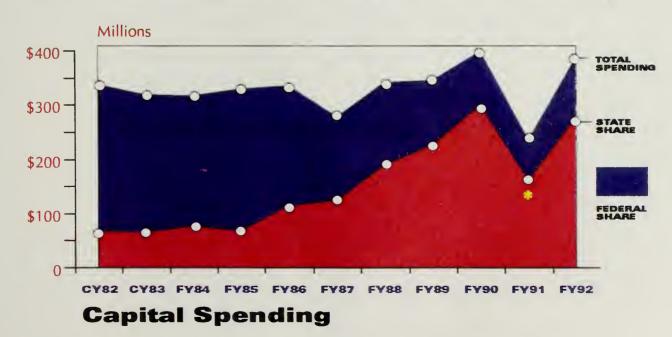
These financial obligations represent the cost of maintaining and extending the mass transit services that will help restore the state's economic strength, support Artery work, and provide the public with the first-class transportation services and facilities they desire.

Competition for Resources

The Authority's interrelated complex of capital funding imperatives arises during tough economic times for the Commonwealth and for the nation. While Massachusetts has begun to emerge from its fiscal crisis, with the state budget in balance, the broader state economy has some distance to go to re-establish long-term economic stability. The bond cap, for example, is an attempt to control the T's budget by controlling debt service costs in this climate of tight state resources.

Competition for limited state money is made more difficult by an unfair labeling of the MBTA at the state level as a "budget buster." This label is a misnomer because of the way the T's budget is structured. In addition to the inclusion of debt service costs in the T's operating budget (representing more than a quarter of the total as the T pays for the recapitalization of the last decade), federal operating and capital assistance has declined over the last decade (see Figure 2, below), and local assessment increases are capped at 2.5 percent.

Figure 2: Declining Federal Share of Capital Spending



^{*} Reflects one-time \$82 million reimbursement for commuter rail vehicle leases.



Capital spending by the MBTA will likely continue to be capped in the near term as the state continues to recover its financial strength. This challenging reality means that the T will need to make tough choices about which projects will be funded from the universe of capital needs. Given the scope of projects that deserve to be designated top-priority imperatives, there is a very real risk that commitments or mandates will not be met. Serious consequences attend the failure to complete any of this work:

- Clean air, clean water, ADA, and Central Artery projects represent federal mandates or legal agreements.
- Expanding T service in areas not currently served by the Authority —
 primarily commuter rail extensions not only responds to these mandates
 and agreements, it represents the expected completion of commitments to
 bring these areas into the transit fold.
- Continuing prudent support for public transit projects ripples
 throughout the regional economy, providing jobs, spurring development,
 and adding stability to the Commonwealth's commercial and tax-generating
 capacity.





Section 2: Expanded Detail

Capital Priorities and Needs Legislative Mandates and Agreements

ALTHOUGH the 1990 Americans with Disabilities Act established firm federal requirements for transit systems to make vehicles and facilities accessible to disabled persons, it did not provide funding to help systems pay for the mandated improvements. The ADA requirements include:

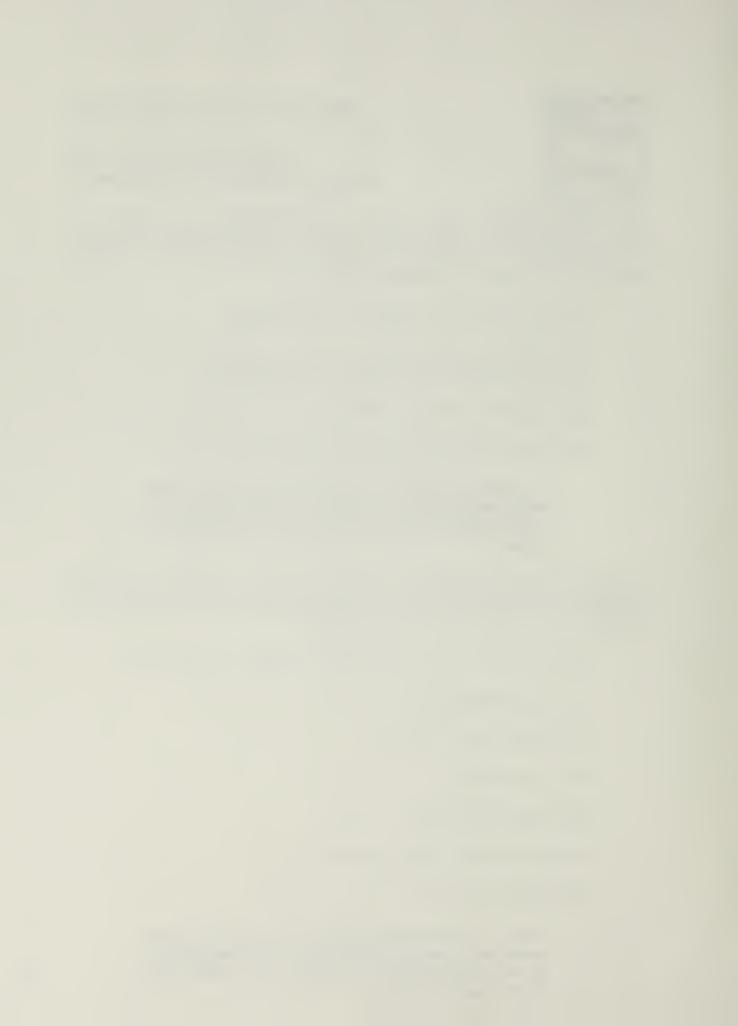
- All new vehicles on fixed routes must be accessible.
- Within five years, all subway and commuter rail trains with two or more cars must have at least one car that is accessible.
- All new subway stations built after January 1992 must be accessible.
- Key existing stations must be made accessible by July 1993.

The cost to the MBTA of complying with ADA requirements over the next five years is estimated to be \$335 million. Total cost of complying with all ADA requirements approaches \$1 billion.

A range of commitments made by or on behalf of the MBTA support Central Artery/ Third Harbor Tunnel construction and the Statewide Implementation Plan (SIP), and thereby the Clean Air Act. These projects include:

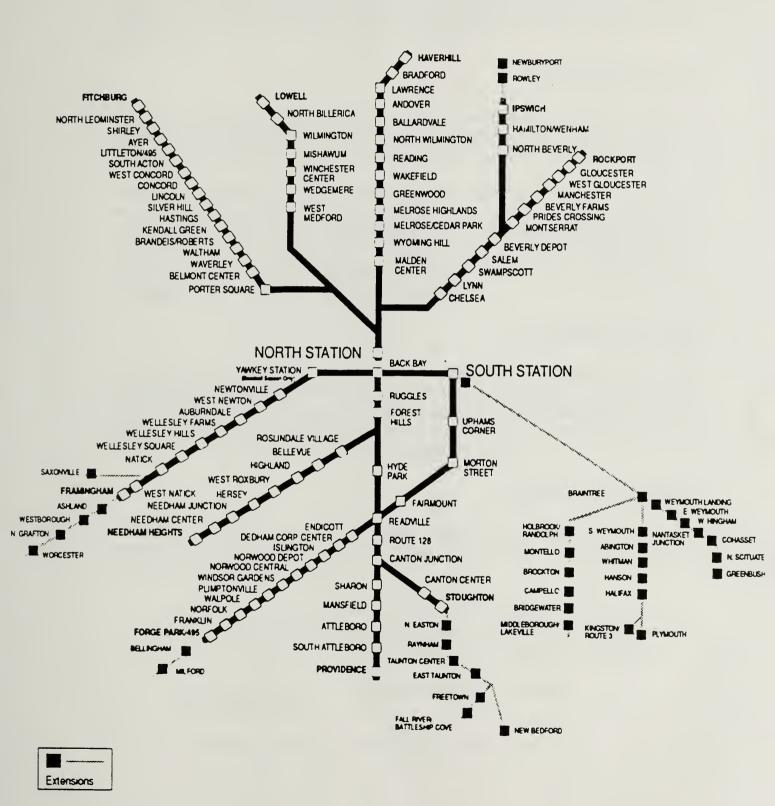
- Commuter Rail extensions (Old Colony, Worcester, Newburyport)
- South Station Bus Terminal
- South Boston Piers Transitway
- Procure new buses
- Blue Line modernization
- Orange and Red Line fleet expansions
- Blue/Red Line connector

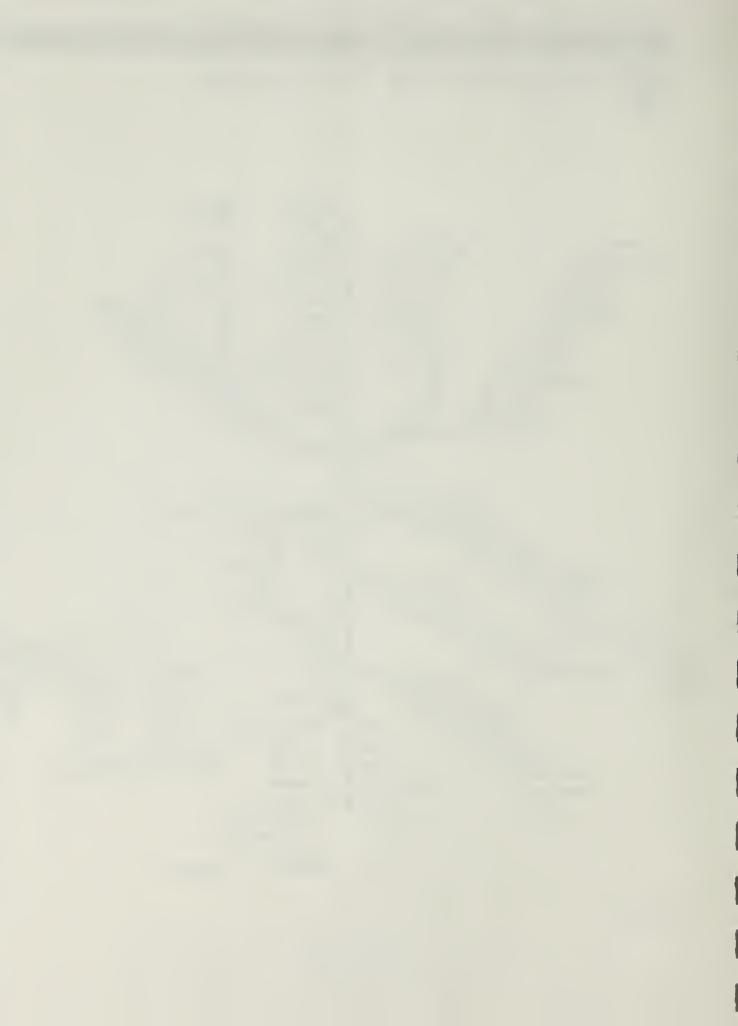
The total cost of complying with Central Artery/SIP commitments is estimated to be \$2.0 billion over the next five years. As more commitments are made by or on behalf of the MBTA, costs will increase.





MBTA Commuter Rail System Extensions





Other Commitments

Other standing commitments to communities for improved transit service include the Green Line Arborway Restoration and the Washington Street Replacement, both SIP commitments.

Infrastructure Needs

At present projected infrastructural reinvestment spending plans over the next five years include rehabilitation of 400 buses, procurement of improved fare collection equipment, and a range of system-wide good-repair projects totaling \$613 million.

However, this projected need is understated. The Authority simply doesn't have enough infrastructure projects ready to be carried out to meet its full reinvestment need. Full need in an average year — to keep bridges, signals, equipment, buildings, vehicles, track, and the like in working order — is estimated to be about \$300 million. Table 1 on page 11 lists the T's annual replacement needs by category, based on the projected useful life cycles of facilities, vehicles, and equipment.

Commuter Rail Needs

The T's capital plan includes a major commuter rail expansion program that is woven into all categories of capital demand, including service expansion, Central Artery/SIP commitments, and infrastructure reinvestment. Average annual infrastructure replacement need for the commuter rail system is estimated to be about \$100 million, or about a third of the total annual infrastructure reinvestment need.

Capacity Enhancement

This category of needs includes projects associated with increasing the capacity of the existing system and expanding service to areas not previously served by the MBTA. Examples of such projects include:

- North Station Transportation Center, estimated cost over five years
 \$143 million, including construction of high level platforms, relocation of the Green Line, and construction of a Green Line/Orange Line superstation.
- Commuter Rail extensions to New Bedford/Fall River and Milford/Bellingham.
- Expanding bus and rail fleets to decrease headways.

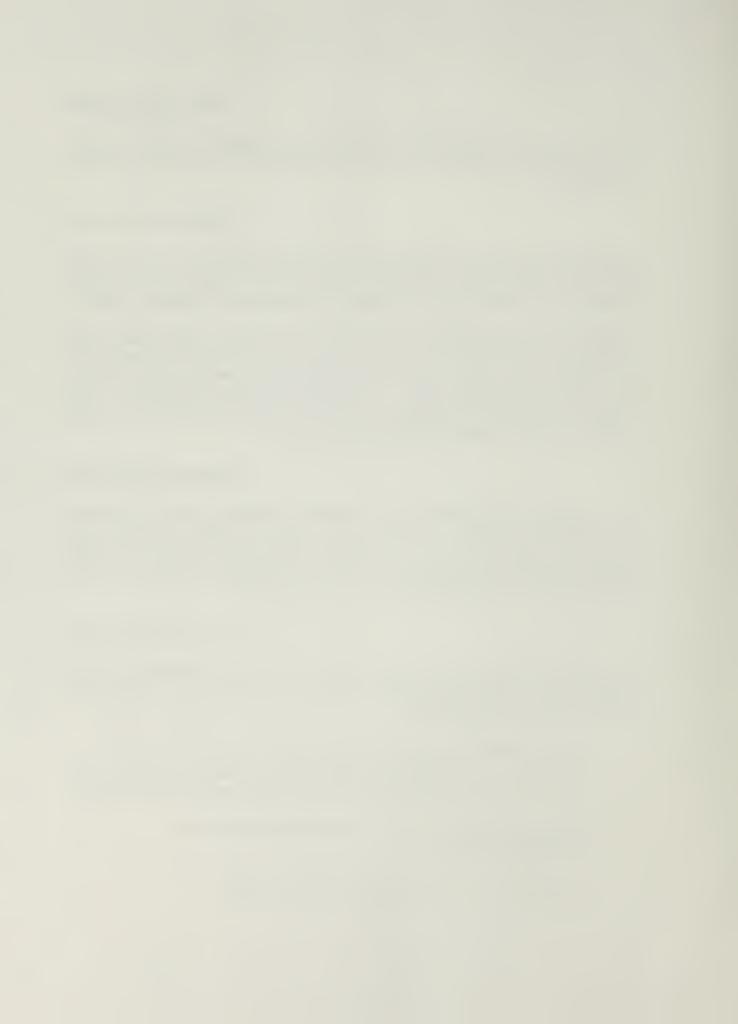
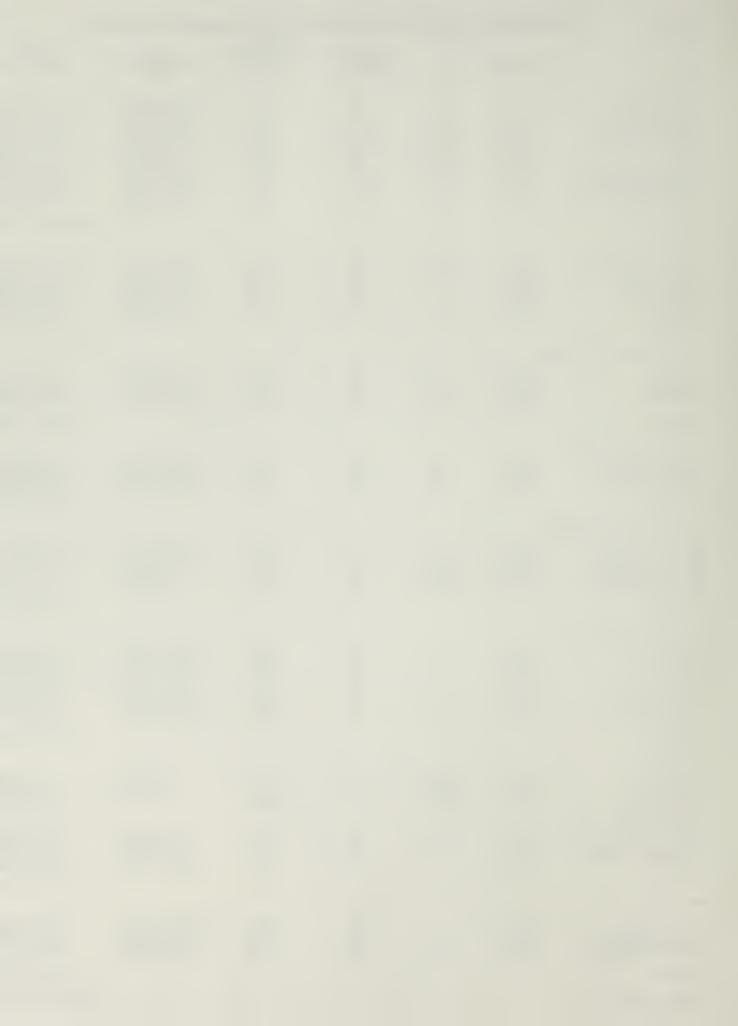


Table 1

Annual Average Infrastructure Reinvestment Needs

Item	Type of Asset	Number	Economic Useful Life (years)	Average Annual Replacement Needs	Unit Replacement Cost	Average Annuai Replacement Cost
Rolling Stock			.,			
Green Line Cars Red Line Cars Orange Line Cars Blue Line Cars Buses Ride Vans Tracklæs Trolleys Single Level Coaches BI-Level Coaches Locomotives Non-Revenue Coaches	Cars Cars Cars Cars Cars Cars Cars Cars	225 216 120 70 1,018 126 50 305 75 59	25 25 25 12 4 20 25 25 25 10	9.0 8.6 4.8 2.8 84.8 31.5 2.5 12.2 3.0 2.4	\$1,800,000 \$1,781,250 \$1,597,826 \$1,631,250 \$225,000 \$31,500 \$210,000 \$1,036,060 \$1,500,000 \$2,310,000 \$21,000	\$16,200,000 \$15,390,000 \$7,669,565 \$4,567,500 \$19,087,500 \$992,250 \$525,000 \$12,639,936 \$4,500,000 \$5,451,600 \$1,148,700
Subtotal						\$88,172,051
Track and Power	A 411	107	20	0.3	£1 500 000	£13 705 000
Rapid Transit Track Commuter Rail Track Thirds Rail Power Stations Substations Catenary	Miles Miles Miles Each Each Miles	183 479 95 1 37 90	20 20 50 50 50 50	9.2 24.0 1.9 0.0 0.7 1.8	\$1,500,000 \$1,500,000 \$800,000 \$7,700,000 \$3,500,000 \$1,000,000	\$13,725,000 \$35,925,000 \$1,520,000 \$154,000 \$2,590,000 \$1,800,000
Subtotal						\$55,714,000
Tunnels, Viaducts, Bridge						
Tunnels Viaduct Vent Shafts Bridges	Miles Miles Each Each	34 2 56 400	60 60 40 40	0.6 0.03 1.4 10.0	\$1,250,000 \$5,000,000 \$2,000,000 \$2,500,000	\$708,333 \$166,667 \$2,800,000 \$25,000,000
Subtotal						\$28,675,000
Stations and Parking						
Heavy Rail Light Rail/Subway Light Rail/Surface Commuter Rail	Each Each Each Each	55 11 81 99	25 25 25 25	2.2 0.4 3.2 4.0	\$20,000,000 \$20,000,000 \$200,000 \$1,300,000	\$44,000,000 \$8,800,000 \$648,000 \$5,148,000
Subtotal						\$58,596,000
Signals/Communications	•					
Central Control RT Track/Wayside CR Track/wayside Mobile Radios Radio Base Stations	Each Miles Miles Each Each	1 183 479 1,050 40	30 30 30 15 15	0.03 6.1 16.0 70.0 2.7	\$50,000,000 \$3,000,000 \$1,000,000 \$3,000 \$250,000	\$1,666,667 \$18,300,000 \$15,966,667 \$210,000 \$666,667
Subtotal						\$36,810,000
Garage/Carhouses						
Red Line Green Line Blue Line Orange Line Buses Trackless Trolley Commuter Rall systemwide	Each Each Each Each Each Each Each	2 4 1 1 7 1 2 2	50 50 50 50 50 50 50	0.04 0.08 0.02 0.02 0.14 0.02 0.04 0.04	\$36,750,000 \$31,500,000 \$52,500,000 \$52,500,000 \$12,600,000 \$170,000,000 \$52,500,000	\$1,470,000 \$2,520,000 \$1,050,000 \$1,050,000 \$3,675,000 \$2,52,000 \$6,800,000 \$2,100,000
Subtotal						\$ 18,91 <i>7</i> ,000
Equipment						
Fare Boxes Turnstiles Bus Shelters BusStop Signs Rolling Stock	Each Each Each Each	1,000 420 306 10,000	15 25 15 10	66.7 16.8 20.4 1,000.0	\$6,000 \$13,000 \$7,000	\$400,000 \$218,400 \$142,800 \$100,000
Replacement Parts Fencing Computer/Mainframes Computer/Periferals Software	Miles Each Total Total	172 1 1 1	20 10 5 10	8.6 0.1 0.2 0.1	\$70,000 \$5,000,000 \$5,000,000 \$20,000,000	\$4,000,000 \$602,000 \$500,000 \$1,000,000 \$2,000,000
Subtotal						\$8,963,200
Buildings						
North Station South Station Arborway Complex Other Buildings	Each Each Each Each	1 1 1 100	50 50 5 0 2 5	0.02 0.02 0.02 4.0	\$130,000,000 \$140,000,000 \$50,000,000 \$100,000	\$2,600,000 \$2,800,000 \$1,000,000 \$400,000
Subtotal						\$5,400,000
Grand Total						\$301,247,251

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Section 3: Funded and Unfunded Projects

THE following tables summarize the gap between capital funding available and capital funding required to meet the Authority's needs in infrastructural reinvestment, ADA compliance, Central Artery/SIP commitments, and other service expansions.

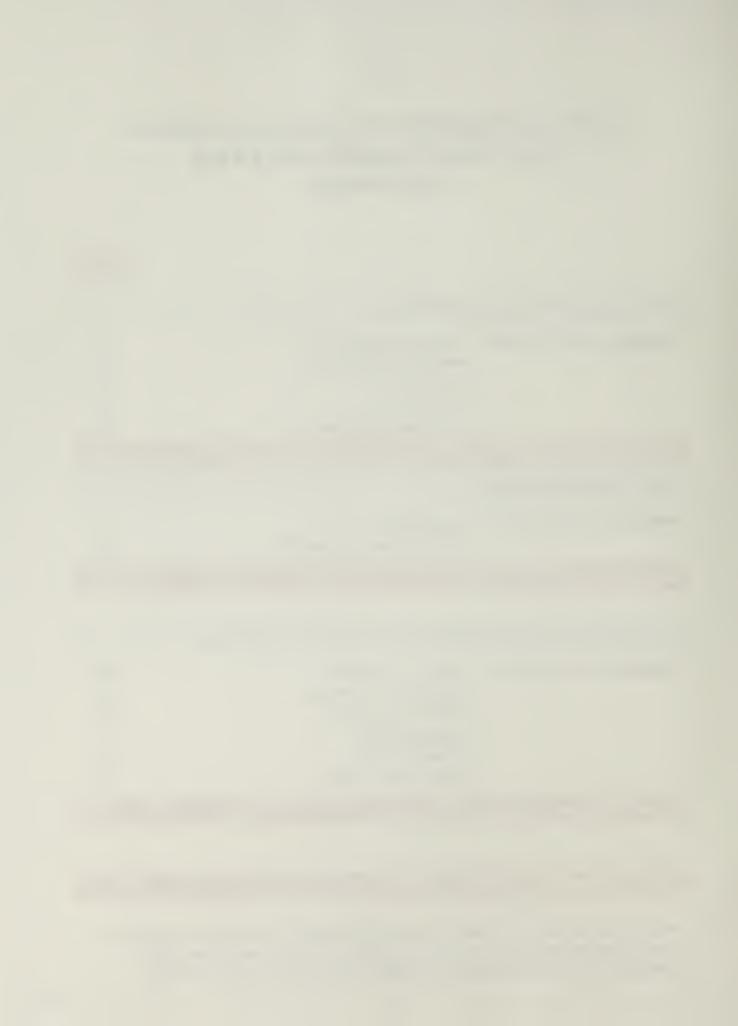
Table 2 on page 13 lists funded capital projects for FY93-FY97. Table 3 on page 14 lists needed projects that are not funded, based on MBTA projections.



CAPITAL PROJECTS FUNDED IN MBTA FIVE-YEAR SPENDING PLAN FY93-FY97

Estimated Spending (\$ millions) **Infrastructure Spending Needs FUNDED PROJECTS:** Rehab 200/180 (option) buses 37 Rehab additional 200 buses 22 Procure 200 buses 110 Fare equipment 90 Systemwide infrastructure 345 **INFRASTRUCTURE FUNDED** 604 **ADA Spending Needs FUNDED PROJECTS:** Key stations plan 55 Green Line vehicle procurement 280 **ADA FUNDED** 335 Central Artery/SIP Commitments Spending Needs **FUNDED PROJECTS: Old Colony Restoration** 480 South Station Bus Terminal 120 South Boston Transitway 342 Newburyport/design 3 **Worcester Extension** 80 Blue Line modernization 260 **CENTRAL ARTERY/SIP FUNDED** 1.285 **TOTAL FUNDED CAPITAL PROJECTS**

NOTE: TOTAL FUNDED CAPITAL PROJECTS REFLECTS SPENDING ASSOCIATED WITH FEDERAL & STATE FUNDING RECEIVED IN FY93 - FY97 AND DOES NOT REFLECT THE USE OF FEDERAL FUNDING IN THE 5 YEAR SPENDING PLAN APPROPRIATED IN PREVIOUS FISCAL YEARS.



UNFUNDED CAPITAL PROJECTS FIVE-YEAR SPENDING PLAN* FY93-FY97

Infrastructure Unfunded Needs

UNFUNDED NEEDS

MBTA Projected Spending (\$ millions)

Systemwide infrastructure reinvestment:		
(Tracks, signals & power improvements, bridge reconstruction, facility		
renovations, plus \$200 million for Boston Engine Terminal beyond normal		
lifecycle costing needs)		
NFUNDED NEEDS	613	
DA Unfunded Needs		
Paratransit Vans	5	
Rejection of Key Station plan	200	
NFUNDED NEEDS	20	
entral Artery Commitments Unfunded Needs		
20,000 additional parking spaces	193	
Commuter Boat terminal	7	
Newburyport restoration/construction	46	
Arborway restoration	15	
Lechmere Station relocation (design & land acquisition)	58	
Washington Street Replacement	40	
Orange Line fleet expansion	131	
Red Line fleet expansion	113	
Circumferential Feasibility Study	3	
Blue/Red lines connector	57	
NFUNDED NEEDS	66	
ther Service Expansion Unfunded Needs		
North Station Transportation Center	143	
New Bedford/Fall River CR extension		
Foxboro CR extension	13	
Saxonville CR extension	32	
Milford/Bellingham	40	
Arborway Maintenance Facility	12:	

TOTAL UNFUNDED CAPITAL SPENDING NEEDS

561

2,042

^{*} On November 18, 1992, the Metropolitan Planning Organization endorsed a recommendation by the Secretary of the Executive Office of Transportation and Construction to establish a policy that, if enacted, would provide up to \$245 million in additional ISTEA funding to the MBTA. These funds would enable the Authority to progress priority projects such as Washington Street Replacement, North Station Transportation Center, Arborway Restoration, and key infrastructure reinvestment.





Section 4: Available Funding

CAPITAL funding now available over five years, including state and federal resources, amounts to about \$2.2 billion, of which the 1991 Bond Authorization Bill provided for \$1.087 billion. The bond spending cap imposed in FY92 includes \$280 million for FY92-93, and \$300 million in FY94-97.

Federal funding has decreased sharply in the last decade (see Figure 2, page 6), despite an increasing roster of mandated obligations such as the ADA, the Clean Air Act, and Central Artery mitigation. Funding categories such as Section 9 and Section 3 are not increasing and are programmed for specific projects such as Old Colony restoration, replacement parts, and other infrastructure projects.

A positive development was the 1991 passage of the Intermodal Surface Transportation Efficiency Act (ISTEA), which permits state discretion in spending of federal money for highways or transit projects. ISTEA should increase funding for mass transit in the 1992-95 period, about \$125 million over four years, or about \$31 million a year. Thus far funding has been approved for the South Station Bus Terminal, Old Colony, and Park and Ride improvements.

Figure 3

Highway Funding Total vs. Flexible (FY93 - FY97: \$4.377 Billion Total) Non-Flexible 68% \$2.964 billion Flexible Funding 94% \$1.413 billion Flexible Funding 94% \$1.413 billion Transit Funding 6% \$88 million



However, ISTEA appropriations have not reached the 1991 authorization levels, and this gap must be closed if we are to receive maximum benefit from this innovative legislation (Figure 3 on page 15 portrays the amount of flexible highway funding now made available to transit projects in Massachusetts). Possible avenues of inquiry for tapping additional ISTEA funds include:

- Using flexible National Highway System and bridge rehabilitation funds.
- Increasing the federal/local funding split for Old Colony from 64/36 to 80/20, for which the T has requested \$80 million over three years.

Further, the Authority intends to explore with the Federal Transportation Administration the use of dedicated federal funds not usable by other transit authorities (this would require legislative action). The MBTA will also explore programs at other federal agencies, such as the Department of Defense and the Environmental Protection Agency, for new sources of funding.

Alternative Funding Mechanisms

The MBTA is exploring a range of alternatives for funding capital construction, including:

- Innovative financing options for the Boston Engine Terminal, which will cost about \$150 million to \$200 million to replace. Options include a Section 9 lease, certificates of participation, outside agency financing, a sale/lease buyback, and a turnkey plan.
- "Reshaping" current projects to determine whether modified schedules and other measures can reduce costs.
- Leasing vehicles with federal or state bond funds, which will spread costs over a longer period and allow funding to be made available to other projects in the near term.
- Taking advantage of FTA program changes, including a provision to allow transit systems to re-sell federally-funded vehicles before they reach the end of their useful lives, using the proceeds to purchase new vehicles.

In a broader sense, the T is developing evaluation criteria for the universe of capital projects by way of measuring costs and benefits and setting reasonable priorities.



Potential Additional Funding Sources

Beyond the various adjustments and techniques described above, the Authority believes aggressive study of substantial new funding sources for capital work must be undertaken. The range of possibility includes:

- Lift the cap on state bond spending.
- Use revenue from other authorities for transit improvements, through legislative action. Possible revenue streams include Masspike toll collections and Massport revenue.
- Establish a dedicated transit fund. The MBTA is the only major transit system in the country that does not have a dedicated funding source. Such a revenue stream would help reduce the T's dependence on the credit and borrowing capacity of the state.
- Establish a dedicated fund for environmental remediation. Cleanup projects will absorb hundreds of millions of dollars well into the next century, which will be drawn from the capital budget if other arrangements are not made.





Section 5: Conclusion

THE MBTA faces the difficult prospect of losing its ability to fund worthwhile, even legislatively-mandated programs if substantial steps are not taken to close the \$2.0 billion projected gap in capital funding over the next five years.

Alternative funding scenarios, additional federal funding, increased capital program efficiency and project management, and other devices for stretching capital capabilities will only go so far in helping meet the Commonwealth's transit needs. Without significant increases in capital funding to restore and maintain MBTA facilities and equipment, respond to Central Artery construction, and meet mandated clean air and ADA requirements, the Authority faces severe consequences:

- Service quality and performance will decline.
- Safety will be compromised.
- Central Artery construction will be more disruptive than anticipated, and when complete the new highway system will be forced to handle an unacceptable burden of traffic.
- The MBTA will not be able to achieve the projected useful lives of its facilities and equipment.
- Environmental quality will suffer, and highway funding will be threatened.
- Regional economic growth will be limited.

We must not permit such consequences to occur. We are emerging from a difficult economic period, with improvement on the horizon. With the legislative, executive, and operational parties involved working closely together to craft a productive transportation plan, we can avoid each of those troubling outcomes. The T is committed — through its capital and service planning — to engaging itself as a catalyst in present and future patterns of regional development, to ensure that the Authority plays a continuing role in meeting the mobility, clean air, and economic growth goals of the Commonwealth.

